ATTACHMENT 5 PORTIONS OF DRAFT REGULATIONS FOR 1,2,3-TRICHLOROPROPANE July 2016

TITLE 22, CALIFORNIA CODE OF REGULATIONS DIVISION 4, CHAPTER 15, ARTICLE 5.5

(1) Amend Section 64444 to read as follows:

§64444. Maximum Contaminant Levels – Organic Chemicals.

The MCLs for the primary drinking water chemicals shown in **T**table 64444-A shall not be exceeded in the water supplied to the public.

Table 64444-A Maximum Contaminant Levels Organic Chemicals

| | Maximum |
|---------------------------------------|-------------|
| | Contaminant |
| Chemical | Level, mg/L |
| (a) Volatile Organic Chemicals (VOCs) | |
| Benzene | 0.001 |
| Carbon Tetrachloride | 0.0005 |
| 1,2-Dichlorobenzene | 0.6 |
| 1,4-Dichlorobenzene | 0.005 |
| 1,1-Dichloroethane | 0.005 |
| 1,2-Dichloroethane | 0.0005 |
| 1,1-Dichloroethylene | 0.006 |
| cis-1,2-Dichloroethylene | 0.006 |
| trans-1,2-Dichloroethylene | 0.01 |
| Dichloromethane | 0.005 |
| 1,2-Dichloropropane | 0.005 |
| 1,3-Dichloropropene | 0.0005 |

| Ethylbenzene | 0.3 |
|---|--------|
| Methyl-tert-butyl ether | 0.013 |
| Monochlorobenzene | 0.07 |
| Styrene | 0.1 |
| 1,1,2,2-Tetrachloroethane | 0.001 |
| Tetrachloroethylene | 0.005 |
| Toluene | 0.15 |
| 1,2,4-Trichlorobenzene | 0.005 |
| 1,1,1-Trichloroethane | 0.200 |
| 1,1,2-Trichloroethane | 0.005 |
| Trichloroethylene | 0.005 |
| Trichlorofluoromethane | 0.15 |
| 1,1,2-Trichloro-1,2,2-Trifluoroethane | 1.2 |
| Vinyl Chloride | 0.0005 |
| Xylenes | 1.750* |
| (b) Non-Volatile-Synthetic Organic Chemicals (SOCs) | |
| Alachlor | 0.002 |
| Atrazine | 0.001 |
| Bentazon | 0.018 |
| Benzo(a)pyrene | 0.0002 |
| Carbofuran | 0.018 |
| Chlordane | 0.0001 |
| 2,4-D | 0.07 |
| Dalapon | 0.2 |
| Dibromochloropropane | 0.0002 |
| Di(2-ethylhexyl)adipate | 0.4 |
| Di(2-ethylhexyl)phthalate | 0.004 |
| Dinoseb | 0.007 |
| Diquat | 0.02 |
| Endothall | 0.1 |

| Endrin | 0.002 |
|---------------------------|----------------------|
| Ethylene Dibromide | 0.00005 |
| Glyphosate | 0.7 |
| Heptachlor | 0.00001 |
| Heptachlor Epoxide | 0.00001 |
| Hexachlorobenzene | 0.001 |
| Hexachlorocyclopentadiene | 0.05 |
| Lindane | 0.0002 |
| Methoxychlor | 0.03 |
| Molinate | 0.02 |
| Oxamyl | 0.05 |
| Pentachlorophenol | 0.001 |
| Picloram | 0.5 |
| Polychlorinated Biphenyls | 0.0005 |
| Simazine | 0.004 |
| Thiobencarb | 0.07 |
| Toxaphene | 0.003 |
| 1,2,3-Trichloropropane | 0.000005 |
| 2,3,7,8-TCDD (Dioxin) | 3 x 10 ⁻⁸ |
| 2,4,5-TP (Silvex) | 0.05 |

^{*}MCL is for either a single isomer or the sum of the isomers.

TITLE 22, CALIFORNIA CODE OF REGULATIONS DIVISION 4, CHAPTER 15, ARTICLE 5.5

(3) Amend Section 64445.1 to read as follows:

§64445.1. Repeat Monitoring and Compliance – Organic Chemicals.

(a) For the purposes of this article, detection shall be defined by the detection limits for purposes of reporting (DLRs) in \pm table 64445.1-A:

Table 64445.1-A Detection Limits for Purposes of Reporting (DLRs) for Regulated Organic Chemicals

| | Detection Limit for |
|---------------------------------------|-----------------------|
| | Purposes of Reporting |
| Chemical | (DLR)_(mg/L) |
| | |
| (a) All VOCs, except as listed | 0.0005 |
| Methyl-tert-butyl ether | 0.003 |
| Trichlorofluoromethane | 0.005 |
| 1,1,2-Trichloro-1,2,2-Trifluoroethane | 0.01 |
| (b) SOCs | |
| Alachlor | 0.001 |
| Atrazine | 0.0005 |
| Bentazon | 0.002 |
| Benzo(a)pyrene | 0.0001 |
| Carbofuran | 0.005 |
| Chlordane | 0.0001 |
| 2,4-D | 0.01 |
| Dalapon | 0.01 |
| Dibromochloropropane (DBCP) | 0.00001 |
| Di(2-ethylhexyl)adipate | 0.005 |

| Di(2-ethylhexyl)phthalate | 0.003 |
|----------------------------------|----------------------|
| Dinoseb | 0.002 |
| Diquat | 0.004 |
| Endothall | 0.045 |
| Endrin | 0.0001 |
| Ethylene dibromide (EDB) | 0.00002 |
| Glyphosate | 0.025 |
| Heptachlor | 0.00001 |
| Heptachlor epoxide | 0.00001 |
| Hexachlorobenzene | 0.0005 |
| Hexachlorocyclopentadiene | 0.001 |
| Lindane | 0.0002 |
| Methoxychlor | 0.01 |
| Molinate | 0.002 |
| Oxamyl | 0.02 |
| Pentachlorophenol | 0.0002 |
| Picloram | 0.001 |
| Polychlorinated biphenyls (PCBs) | |
| (as decachlorobiphenyl) | 0.0005 |
| Simazine | 0.001 |
| Thiobencarb | 0.001 |
| Toxaphene | 0.001 |
| 1,2,3-Trichloropropane | <u>0.000005</u> |
| 2,3,7,8-TCDD (Dioxin) | 5 x 10 ⁻⁹ |
| 2,4,5-TP (Silvex) | 0.001 |
| | |

- (b) When organic chemicals are not detected pursuant to $\pm t$ able 64445.1-A.
- (1) A water system which has not detected any of the VOCs on ‡table 64444-A during the initial four quarters of monitoring, shall collect and analyze one sample annually. After a minimum of three years of annual sampling with no detection of a

VOC in <u>T</u>table 64444-A, a system using groundwater may reduce the monitoring frequency to one sample during each compliance period. A system using surface water shall continue monitoring annually.

- (2) A system serving more than 3,300 persons which has not detected an SOC on \mp table 64444-A during the initial four quarters of monitoring shall collect a minimum of two quarterly samples for that SOC in one year during the year designated by the State Board of each subsequent compliance period. The year will be designated on the basis of historical monitoring frequency and laboratory capacity.
- (3) A system serving 3,300 persons or less which has not detected an SOC on Ttable 64444-A during the initial four quarters of monitoring shall collect a minimum of one sample for that SOC during the year designated by the State Board of each subsequent compliance period. The year will be designated on the basis of historical monitoring frequency and laboratory capacity.
 - (c) When organic chemicals are detected pursuant to ∓table 64445.1-A.
- (1) Prior to proceeding with the requirements of paragraphs (e)(2) through (7), the water supplier may first confirm the analytical result, as follows: Within seven days from the notification of an initial finding from a laboratory reporting the presence of one or more organic chemicals in a water sample, the water supplier shall collect one or two additional sample(s) to confirm the initial finding. Confirmation of the initial finding shall be shown by the presence of the organic chemical in either the first or second additional sample, and the detected level of the contaminant for compliance purposes shall be the average of the initial and confirmation sample(s). The initial finding shall be disregarded if two additional samples do not show the presence of the organic chemical.
- (2) If one or both of the related organic chemicals heptachlor and heptachlor epoxide are detected, subsequent monitoring shall analyze for both chemicals until there has been no detection of either chemical for one compliance period.

- (3) A groundwater sampling site at which one or more of the following chemicals has been detected shall be monitored quarterly for vinyl chloride: trichloroethylene, tetrachloroethylene, 1,2-dichloroethane, 1,1,1-trichloroethane, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene, or 1,1-dichloroethylene. If vinyl chloride is not detected in the first quarterly sample, the sampling site shall be monitored once for vinyl chloride during each compliance period.
- (4) If the detected level of organic chemicals for any sampling site does not exceed any shown in ‡table 64444-A, the water source shall be resampled every three months and the samples analyzed for the detected chemicals. After one year of sampling an approved surface water system or two quarters of sampling a groundwater system, the State Board will consider allowing the water supplier to reduce the sampling to once per year upon request, based on a review of previous sampling data. Systems shall monitor during the quarter(s) which previously yielded the highest analytical results.
- (5) If the detected level of an organic chemical for any sampling site exceeds that listed in \mp table 64444-A, the water supplier shall report this information to the State Board within 48 hours of receipt of the result. Unless use of the contaminated source is discontinued, the water supplier shall resample the contaminated source and compliance shall be determined as follows:
- (A) Water systems serving more than 3,300 persons shall sample monthly for six months and shall submit the results to the State Board as specified in Section 64469. If the average concentration of the initial finding, confirmation sample(s), and six subsequent monthly samples does not exceed the MCL shown in Ttable 64444-A the water supplier may reduce the sampling frequency to once every three months. If the running annual average or the average concentration of the initial finding, confirmation sample(s), and six subsequent monthly samples exceeds the MCL shown in Ttable 64444-A, the water system shall be deemed to be in violation of Section 64444.

- (B) Water systems serving 3,300 persons or less shall sample quarterly for a minimum of one year and shall submit the results to the State Board as specified in Ssection 64469. If the running annual average concentration does not exceed the MCL in Ttable 64444-A, the water supplier may reduce the sampling frequency to once every year during the quarter that previously yielded the highest analytical result. Quarterly monitoring shall resume if any reduced frequency sample result exceeds the MCL. If the running annual average concentration exceeds the MCL in Ttable 64444-A, the water system shall be deemed to be in violation of Ssection 64444.
- (C) If any sample would cause the running annual average to exceed the MCL, the water system is immediately in violation. If a system takes more than one sample in a quarter, the average of all the results for that quarter shall be used when calculating the running annual average. If a system fails to complete four consecutive quarters of monitoring, the running annual average shall be based on an average of the available data.
- (6) If any resample, other than those taken in accordance with <u>paragraph (c)</u>(5) of this section, of a water sampling site shows that the concentration of any organic chemical exceeds a MCL shown in <u>Table</u> 64444-A, the water supplier shall proceed in accordance with <u>paragraphs (c)</u>(1) and <u>(c)</u>(4), or <u>paragraph (c)</u>(5).
- (7) If an organic chemical is detected and the concentration exceeds ten times the MCL, the water supplier shall notify the State Board within 48 hours of the receipt of the results and the contaminated site shall be resampled within 48 hours to confirm the result. The water supplier shall notify the State Board of the result of the confirmation sample(s) within 24 hours of the receipt of the confirmation result(s).
- (A) If the average concentration of the original and confirmation sample(s) is less than or equal to ten times the MCL, the water supplier shall proceed in accordance with subsection paragraph (c)(5).
- (B) If the average concentration of the original and confirmation samples exceeds ten times the MCL, use of the contaminated water source shall immediately be

discontinued, if directed by the State Board. Such a water source shall not be returned to service without written approval from the State Board.



TITLE 22, CALIFORNIA CODE OF REGULATIONS DIVISION 4, CHAPTER 15, ARTICLE 12

(4) Amend Section 64447.4 to read as follows:

§64447.4. Best Available Technologies (BAT) – Organic Chemicals.

The technologies listed in <u>Ttable 64447.4-A</u> are the best available technology, treatment technologies, or other means available for achieving compliance with the MCLs in <u>Ttable 64444-A</u> for organic chemicals.

Table 64447.4-A

Best Available Technologies (BATs)

Organic Chemicals

| Chemical Best Available Technolog | | ailable Technologies |
|---------------------------------------|-----------|----------------------|
| | Granular | Packed |
| | Activated | Tower |
| | Carbon | Aeration Oxidation |
| | | |
| (a) Volatile Organic Chemicals (VOCs) | | |
| Benzene | Χ | Χ |
| Carbon Tetrachloride | Χ | Χ |
| 1,2-Dichlorobenzene | Χ | Χ |
| 1,4-Dichlorobenzene | Χ | Χ |
| 1,1-Dichloroethane | Χ | Χ |
| 1,2-Dichloroethane | Χ | Χ |
| 1,1-Dichloroethylene | Χ | Χ |
| cis-1,2-Dichloroethylene | Χ | Χ |
| trans-1,2-Dichloroethylene | Χ | Χ |
| Dichloromethane | | Χ |
| 1,2-Dichloropropane | Χ | Χ |
| 1,3-Dichloropropene | Χ | Χ |
| Ethylbenzene | Χ | Χ |

| Methyl-tert-butyl ether | | X |
|--------------------------------------|-----|---|
| Monochlorobenzene | X | Χ |
| Styrene | X | Χ |
| 1,1,2,2-Tetrachloroethane | X | Χ |
| Tetrachloroethylene | X | Χ |
| Toluene | X | Χ |
| 1,2,4-Trichlorobenzene | X | X |
| 1,1,1-Trichloroethane | X | Χ |
| 1,1,2-Trichloroethane | X | Х |
| Trichlorofluoromethane | X | X |
| Trichlorotrifluoroethane | X | X |
| Trichloroethylene | X | Χ |
| Vinyl Chloride | | Χ |
| Xylenes | X | Χ |
| (b) Synthetic Organic Chemicals (SOC | Cs) | |
| Alachlor | X | X |
| Atrazine | X | |
| Bentazon | | Χ |
| Benzo(a)pyrene | X | |
| Carbofuran | X | |
| Chlordane | X | |
| 2,4-D | X | |
| Dalapon | X | |
| Di(2-ethylhexyl)adipate | X | Χ |
| Dinoseb | | Χ |
| Diquat | Χ | |
| 1,2-Dibromo-3-chloropropane | X | Χ |
| Di(2-ethylhexyl)phthalate | X | |
| Endothall | Χ | |
| Endrin | X | |

| Ethylene Dibromide | X | X | |
|---------------------------|---|---|---|
| Glyphosate | | | Χ |
| Heptachlor | Χ | | |
| Heptachlor epoxide | Χ | | |
| Hexachlorocyclopentadiene | Χ | Χ | |
| Lindane | Χ | | |
| Methoxychlor | X | | |
| Molinate | X | | |
| Oxamyl | X | | |
| Pichloram | X | | |
| Pentachlorophenol | Χ | | |
| Polychlorinated Biphenyls | X | | |
| Simazine | X | | |
| Thiobencarb | X | | |
| Toxaphene | X | X | |
| 1,2,3-Trichloropropane | X | | |
| 2,3,7,8-TCDD (Dioxin) | X | | |
| 2,4,5-TP (Silvex) | X | | |